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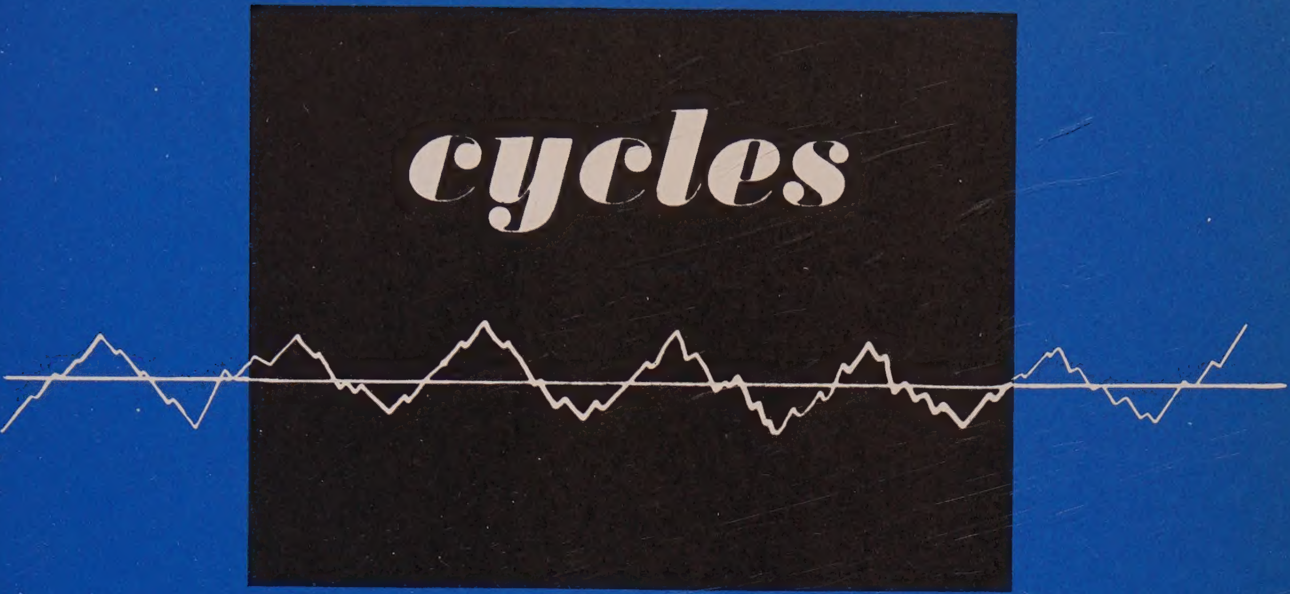

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The danger signal is repeated.

Cycles are only *one* of the forces you must consider if you are attempting economic forecasting.

If you ignore the cycles you run the risk of serious errors.

But unless you study and weigh all the *other* forces that, in addition to cycles, combine to create economic change, you will make grave mistakes.

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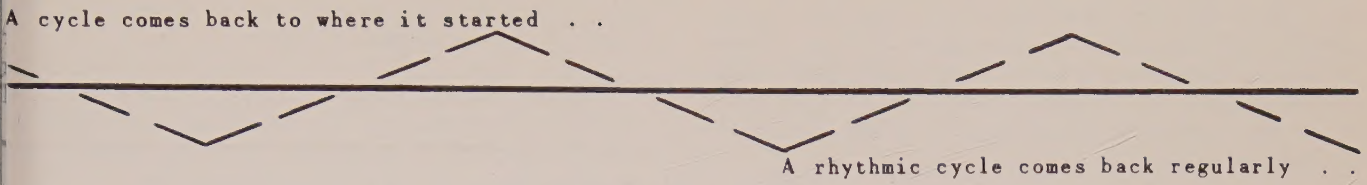

A cycle comes back to where it started . .
A rhythmic cycle comes back regularly . .

THE DIRECTOR'S LETTER

Dear Member

You may have noticed that *Cycles* is getting more and more practical. This does not mean that the *Foundation* is becoming more practical. It merely means that we are concentrating our egg-head stuff in the *Journal of Cycle Research* which many of you don't see. I think it is an improvement to separate the two parts of our work.

The January issue of *Cycles* was *all* practical, and endeavored to throw what light we could on what lies ahead for stocks, various commodity prices (soybeans, wheat, cocoa, oats, and corn), steel, aluminum, and shoe production, cotton consumption, manufacturing and industrial production, and seven leading indicators (number of new incorporations, hours worked, sensitive prices, new orders, residential construction, non-residential construction, and liabilities of commercial and industrial failures).

The current issue goes even further and attempts to apply cycle knowledge to the price of an individual stock. This attempt is the sort of thing you should do for yourself, but maybe you don't have the time or the know-how.

This application of cycle technique to an individual stock is not to be thought of as recommending that stock for purchase. However, if you are engaged in trading in that stock, the article will give you factual information that you should be able to combine with other facts—to your advantage.

Speaking of combining cycle knowledge with other knowledge, you should read the article in this issue by Tony Gaubis summing up his talk before the New York Chapter of the Foundation on December 14th of last year. This article shows you how a professional goes about the matter. You should do the same for the things in which *you* are interested.

Some of our egg-head friends may look down their noses at us for our attention to the practical. Egg-heads are often resentful of the fact that they don't earn as much money as practical folk. They forget that no one asked them to be egg-heads—it was their own choice.

Many egg-heads could do very well in business, but of course some of them couldn't hold down a practical job for a week. In their hearts they know this and so they pretend to look down on practical affairs.

I'm reminded of a conversation I had with a girl I know who works at a certain large University. We were talking about a mutual friend who had recently retired as Dean of Engineering.

"How did Fred get on here?" I asked.

"Not so well," she answered. "He never seemed to be able to get on to the academic way of doing things."

"What is the academic way?"

"To do everything wrong!" she said. Then, after a pause, she added, "And as slowly as possible!!"

A third reason why egg-heads look down on practical matters derives from the English point of view. Over there much scientific work has been done by the nobility. The nobility, freed from the need of earning a living, often took to science to keep busy. The nobility scorn people in "trade." Hence it is fashionable for commoner scientists to adopt the same point of view.

Our purpose in being practical is, however, a scientific one. Only by seeing how the cycles work out can we know for sure whether or not they are valid. Our projections are our testing ground. If they benefit you, that's all to the good—but it's not their purpose. It's as if Mr. Ford were testing a new car by a cross-country run from New York to Los Angeles. You wanted to go to Los Angeles (and who wouldn't this weather!). He let you ride along, at your own risk. So with us.

In stating that we have a scientific purpose for our practical projections I am not apologizing. It is the *business* of science to predict—to be practical. One might almost say, where there is no prediction there is no science.

Also, I have not meant to be unkind to our egg-head friends in calling attention to the foibles of some of them. I myself am an egg-head, and quite satisfied to be one.

I even *look* like an egg-head. I remember once in the wash room of a New York Club overhearing some of the members talking about "those damn professors." (It was war time and they were being subjected to regulation by impractical academicians who had been drafted by the government to help run the war.) After a while one of them saw me and said to the others "Shh!"

Although I look like one, I've never been a professor—except for teaching law at the University of California and the University of Southern California extension divisions, and that probably doesn't count.

Actually, most of my life, I've earned my living by producing. No work, no eat. That is why I have such sympathy for the member who wants practical useful information.

I'm reminded of the time in Los Angeles when my partner (in the real estate mortgage brokerage business) and I were looking out of our back window at some cats fishing food out of a garbage can.

"That's what we are—alley cats!" said my partner. "If we don't get the deals over, we starve. It must be nice to be a parlor cat in a nice office with some big corporation putting out a bowl of cream regularly!"

So, by training, I'm an alley cat. I guess that's what gives me my drive. But inside I'm an egg-head, and that is why I take pleasure in the progress report of our basic research program also published in this issue.

Basic research progress means that we are beginning to get somewhere in our search for *cause*. The more we know of cycle *cause* and cycle *law* the better we can be from a practical standpoint. The two go hand in hand.

Cordially yours,

Edward R. Dewey

Director

Progress Report

Basic Research Program

October 31 1960

You will be pleased to know that we have ade real progress in our Basic Research Proram during the past year.

Of course, I am not satisifed—one never is. ut per dollar spent I think we have done very ell indeed.

We have three main objectives, as follows:

1) To organize the knowledge that we have already.
2) To stimulate research by others.
3) To conduct additional research ourselves.

. *Organization of Knowledge*

Science is *organized* fact. If we could ully organize what we already know we would ave made a major step forward. Along these ines we have done three things:

1. We prepared and published (in the Janary 1960 *Journal of Cycle Research*) a subject ibliography of all material published by the oundation, 1940-1959. It took 18 pages merely o list by subject all the articles we have ublished over the years.

2. We have made considerable progress oward the compilation of the oft-talked-of atalogue of cycles. Publication is planned or mid-1961. This compilation will list not nly all the cycles we ourselves have disovered, but all the cycles mentioned in any ooks and articles contained on our library.

When it is published this catalogue will ell you all the cycles we know about that ave been alleged in any field of natural and ocial science (for example, in pig iron rices, in earthquakes, in weather). In adition, the cross index will tell you all the ifferent things that have cycles of the same ave length. This information will throw light n interrelationships and *cause*.

3. In a talk I gave in Siena, Italy, before the 7th International Conference of Biological Rhythm last September 5th, I marshalled reasons for thinking that at least some of the rhythms we have been studying are exogenous—that is, originate outside of the phenomenon in which they are found.

This talk and its exhibits fill some 48 pages of the *Journal of Cycle Research* for October 1960. This talk was really the first draft of a section of the book I am supposed to write in 1962.

II. Stimulation of Research

1. The talk which was given in Italy could be listed as an item in this category. I hope it will stimulate additional research on the part of at least some of the biologists who attended, and others who are reached by the material.

2. During 1960 we sent the *Journal of Cycle Research* free to 219 scientists who are active in our field. In general I do not approve of giving things for nothing. Free distribution will be discontinued for 1961, but a special price will be offered so that those really interested can continue to receive it regardless of lack of money.

3. We have prepared and are about to publish a new directory of cycle scientists, so that scientists engaged in one aspect of cycle study can know the names of workers in other areas. The directory we published some years back is now out of print, and out of date as well.

4. A plan has been developed to offer gold medals and cash awards to scientists who publish worthwhile books or papers in our field. It is felt that such action will stimulate a considerable amount of research not obtainable in any other way.

III. Our Own Basic Research

We have done a considerable amount of basic research of our own. (You will remember that basic research is defined as research of no immediate practical usefulness—it is research designed to throw light on *cause* and *laws*.) A list follows:

1. We have confirmed Tchijevsky's theory that there is an association between the sunspot cycle and mass human excitability, 300 B.C. to date.

2. We have discovered a second cycle in mass human excitability, 300 B.C. to date, slightly longer than the sunspot cycle.

3. We have discovered a 200-year cycle in the length of the sunspot cycle and have investigated a possible 11.73-year cycle in sunspot numbers which may be the cause of the 200-year alternation in wave length in the sunspot cycle itself.

4. We have determined the constant that needs to be added to sunspot numbers in order to make analysis of short cycles in sunspot numbers possible.

5. We have reason to believe that the well known 5.91-year cycle is present in sunspot numbers, but we have not yet confirmed that it is present as a *rhythm*, i.e., that it repeats time after time. We have, however, determined that this cycle has been present *on the average* in sunspot numbers, 1749-1959, and that, on the average, it crests at the same time as here on earth.

6. We have definitized the well known 17-week cycle in stock prices at 17 1/6 weeks and have traced it back through 1897. (The fact that the results of a piece of research has practical usefulness does not mean that it isn't "basic." The *criterion* is the purpose for which the investigation is conducted. To discriminate against the practical is pedantry of the worst sort.

7. We have found a 17-week cycle in sunspot numbers, 1954 to date, and we are now in the process of seeing if this cycle continues backward and if its length is exactly the same as the corresponding cycle in stock prices. If so we may suspect that the cause of this cycle at least lies outside the earth.

8. We have done a great deal of additional work relative to latitudinal passage. (You will remember that latitudinal passage is the tendency for rhythmic cycles of any particular length to crest later and later as found from either pole toward the equator.) More particularly:

   a. We have determined the average latitude of sunspots, 1749-1959 so that comparison between cycles on earth and the same cycles on the sun can be more readily made.

   b. Daily 1958 data for 40 stations from 80° N. Latitude to the South pole have been studied for (i) barometric pressure, (ii) terrestrial magnetism, and (iii) critical frequency of the F_2 layer of the Ionosphere and the height of the F layer. A 5.111-day cycle was investigated. Latitudinal passage of barometric pressure and terrestrial magnetism was confirmed, and counter passage for the F_2 and F layers was confirmed, corresponding to similar behavior on the sun.

   c. Rainfall data for 41 stations with records over 100 years were studied for behavior of 11.08- and 9.60-year cycles. Latitudinal passage was confirmed.

   d. The 9.60-year cycle in the abundance of rabbits was shown to evidence latitudinal passage.

   e. The 3.86-year cycle in the abundance of small rodents was shown to have probable latitudinal passage.

9. We have done a good deal of research of various sorts that has not as yet reached the publication stage.

10. Our basic research objectives include the publication of cycle studies by others and the publication of data useful for cycle research. Roughly, one fourth of the material published in the *Journal of Cycle Research* during the past year is of this sort.

It has taken a little while to get going but we are now as fully under way as present resources justify. I am hoping for more strides forward in the year to come.

Edward R. Dewey

MY THIRTY YEARS' STUDY OF STOCK MARKET CYCLES

Editor's note: On our index page we usually carry the warning that cycles are *one* of the factors you must consider if you are attempting to forecast. The following article by Mr. Anthony Gaubis illustrates what we mean by that warning.

The article is a copy of a talk given by Mr. Gaubis at the December 14 meeting of the New York Chapter. In it he discusses the importance of the 10-year pattern in stock prices. In addition, he evaluates the other factors which he believes are significant.

This is how a pro operates—*all* the influences, including the cycles, are woven together to reach a well-balanced conclusion. We are limited to the field of cycles. If you want to forecast, you should use all the cycle knowledge you can get. Then, as Mr. Gaubis does, confirm or modify your conclusions by considering other factors.

Mr. Gaubis is the head of Anthony Gaubis & Company, Investment Counselors, 122 East 42nd Street, New York 17, New York.

Before I start my talk, I should like to xplain the title chosen for my remarks.

Actually, my studies of the stock market ycle go back for more than thirty years as hey began when I joined the staff of the usiness Forecasting Division of AT&T in 924. In our preparation of one year, three ear, and five year business forecasts at T&T, we had to work with the stock market ycle to some extent because it had become bvious that in spite of all of the Wall Street heories and propaganda, the stock market had greater influence on the level and trend of usiness activity than vice versa.

I was offered a position as research assistant to Mr. Edgar Lawrence Smith in late 1928 hen Mr. Smith had heard of some of the work I ad done with AT&T, and wanted to change he emphasis of his own studies on the subject f common stocks to forecasting turning points n the cycle. Mr. Smith had become quite concerned over the fact that stock prices had isen to well above values warranted by demonstrated earning power, plus normal deviations rom an underlying growth trend, and felt that uring the next few years, at least, emphasis ight well be placed on the cycle rather than n "long-term growth."

In the spring of 1929, Mr. Smith started to rastically reduce holdings of equities in the vo mutual investment trusts which he had rganized in 1924 following the publication of s book on *Common Stocks as Long Term Investments*. A program of gradually selling stocks during periods of strength led to a position of 70% in cash or the equivalent by September of that year. Unfortunately, for both Mr. Smith and the people who had invested in these funds, his Directors refused to go along with him, and one of the most prominent economists of that day also withdrew his support of Mr. Smith's work on the grounds that the Federal Reserve Board had shown quite clearly that it could and would prevent the development of even a 1920-type of business readjustment. As a result Mr. Smith sold out to the Irving Trust Company in September, 1929, when that bank decided that they would like to get into the business of advising investors on common stocks, apart from the field of Trust Department activities as such.

Mr. Smith stayed on as President of his company which was now a 100% owned subsidiary of the Irving Trust. By that time my own job was that of head of the Research Department. I continued the type of research for which I was originally hired — that of trying to find ways of anticipating the turning points in the stock market cycle, as well as deciding which stocks were the safest ones to buy and hold during the rising phases of the cycle. While seeking a common denominator to the problem of the duration of market cycles, I developed a theory on stock market Timing which I called to the attention of Mr. Smith in a memorandum under the date of July 12, 1930, and which nine years later became the basis of his book: *Tides in the Affairs of Men.* In this original report on "Timing", I started out with the statement: "A check of supposed periodicity of stock market cycles has led to the development of a promising set of rules for calling the major turning points in the stock market averages. Although these rules are extremely mechanical and appear to have little or no logical basis, their record as tested out over a period of forty-six years (or as far back as data are available) seems to demand some respect and perhaps serious attention." This memorandum pointed out that there appeared to be three overlapping ten year cycles, one of which called for a decline in the stock market starting in the third year of every decade and ending either late in that year or sometime in the fourth year. The second called for a decline in either the sixth or seventh year of each decade; while the third indicated that line of least resistance in the stock market appeared to be definitely downward in the tenth year of each decade. When Mr. Smith read this memorandum he asked the logical question of "Why?" The only clue I had at that time was a possibility that there were weather cycles which influenced the size of our crops and thereby had an important bearing on the cost and supply of certain raw materials used in industry as well as on the cost of food. This clue was based on a 1927 conference I had in Washington with a man who was at that time connected with the Bureau of Agricultural Economics and had already demonstrated unusual brilliance in his research studies.

I had looked up this individual in order to find out if the propanganda coming out of the various farm bureaus at that time to the effect that we were about to see a major depression because of the low prices for farm products, should be taken very seriously. Our work at AT&T in connection with our projections of the business outlook for 1927 and 1928 pointed to the probability of only a small recession in 1927. We were trying to find out if our projections were likely to be in error in view of the forebodings of the various farm organizations.

I had written to this Government official as to the reasons for my coming to Washington and found he was prepared for me. He was extremely gracious and showed me a series of charts which indicated quite clearly that we had no need to be concerned about the low prices prevailing for farm products from an over-all business point of view. He pointed out that low prices for farm products were a favorable factor for the economy as a whole although this was something he could not state publicly as he worked for a department which had as one of its primary objectives the securing of as high prices as possible for the farmers' output. He explained that low farm product prices were a reflection of large crops. Since about 50% of farm output (notably cotton, flax, and soybeans) were essentially raw materials for industry, a combination of large supplies and low prices encouraged manufacturers to expand their operation. Freight car loadings and, therefore, the railroad industry, also benefited from large crops. At the same time, low prices on the portion of farm output which went into food had a favorable affect on the cost of living for the average family. A reduction in food costs of even as little as one dollar a week meant that there were $40 million more available each week for the purchase of other goods. Of almost equal importance was the fact that a farmer who had a large crop of cotton or wheat to sell at 75% of what he considered a good price, was still better off than he had been during periods of drought when prices were high but when he had virtually nothing to sell.

Upon his retirement in 1931, Mr. Smith started to do research work of his own on the "why" of the Timing cycles which I had called to his attention in July of 1930. He became particularly interested in weather cycles as affecting mass psychology once he had discovered that fluctuations in weather do affect the chemistry of the blood and, therefore, tend to influence the psychology of the more sensitive individuals. (I might add, parenthetically, that if only 5% to 10% of the people are of the sensitive type whose judgment is influenced by fluctuations in say the average barometric level, their decisions to either buy or sell stocks could bring about a reversal of previous trends. Our national tendency to use technical studies designed to "follow the crowd" or an indicated trend, can result in a continuation of any move initiated by the decisions of the sensitive people, with the extent of the subsequent move depending upon the orthodox fundamental factors such as whether credit has been overextended, the supply and demand for goods, our stage in the inflation cycle, etc.)

At this point I might interject another item of personal experience to confirm the theory that weather does influence the psychology or mental attitudes of some people.

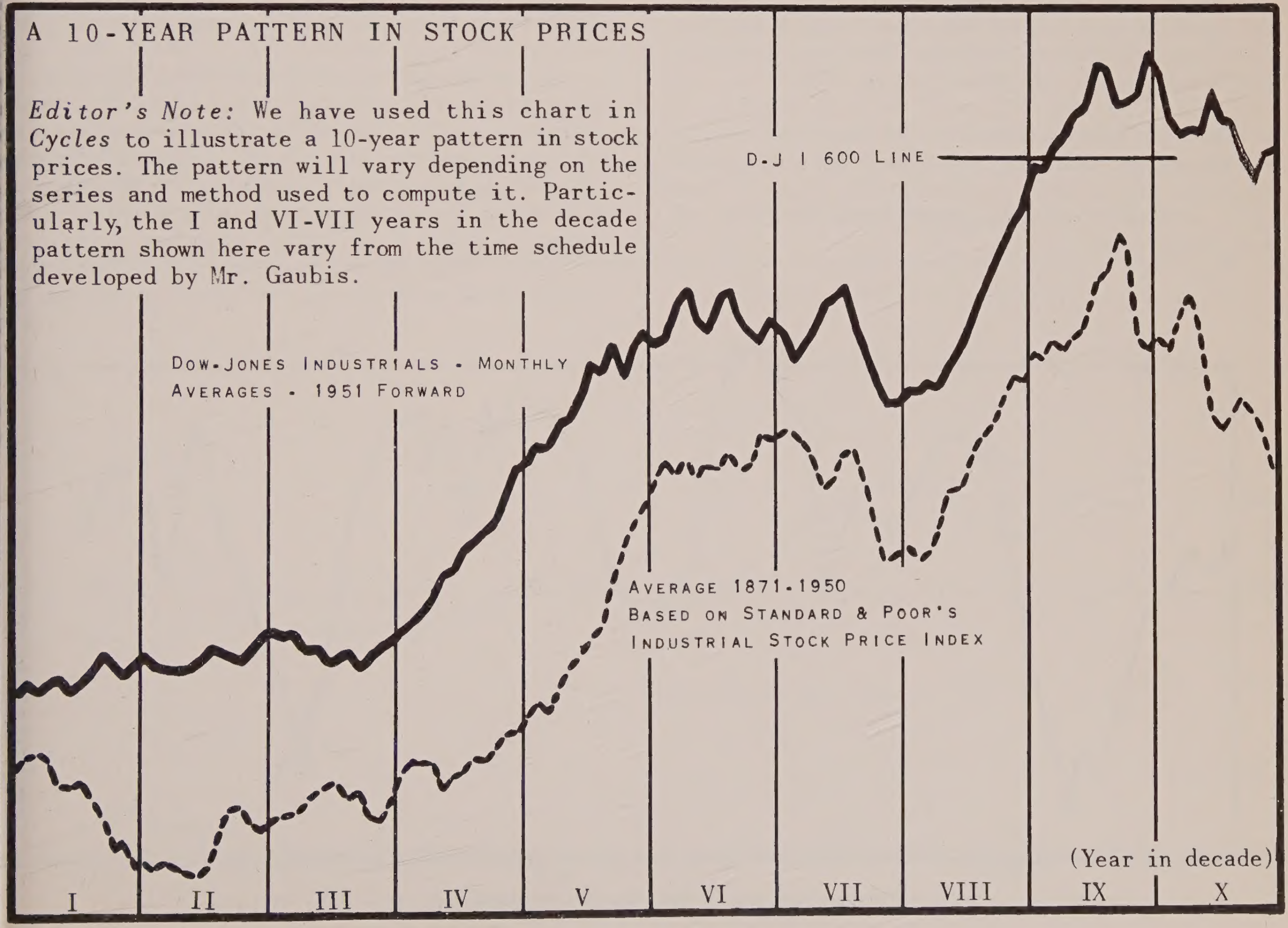
While I was in the West Indies for a brief vacation about fifteen years ago, I made a courtesy call on the Vice President of one of the large New York banks who was then in charge of the branch located on this island. When I told him that I had been associated with Edgar Lawrence Smith and that Smith was then doing some research on weather as a factor in the cycle, he told me that this was a subject he could not normally discuss because of the conventional taboos imposed on the head of a bank or bank branch. He stated that he had found that the people in this particular country were very temperamental and that there was a definite correlation between their temperaments and weather. He had discovered, specifically, that whenever the "wind was from the east, and the barometer was falling" most of the bank's customers who wanted a favor from the bank tended to be very unreasonable if their requests were not granted completely. On the basis of this phenomenon, he had made it a point to postpone any conferences with clients who were applying for loans or changes in terms of their arrangements with the bank whenever "the wind was from the east, and the barometer was falling." Since adopting that rule, he had not lost a single customer for the bank, where prior to that time a number of his customers had refused to listen to reason when the weather aspects were unfavorable, and had transferred their accounts to a rival institution! The payoff was that this bank executive told me he found his wife was also very sensitive to changes in climatic conditions. He, therefore, made it a point to mix "two stiff cocktails" for her the minute he got home, and found that this kept her from being in a nagging mood all night!

Getting back to the meat of my discussion this evening: I have found it necessary to modify only very slightly the Timing discoveries summarized in my July 1930 memorandum on the apparent presence of three overlapping ten year cycles which I mentioned a few minutes ago. For those of you who might be interested in studying this approach, *which has now been tested in actual practice for thirty years,* my findings might be summarized as follows:

1. From a strictly Timing point of view, the line of least resistance in the stock market might normally be expected to be downward following an upward trend into the late summer or early fall of the ninth year of each decade - as in 1909, 1919, 1929, 1939, 1949 and 1959.

2. The major portion of a decline from whatever high is seen late in the ninth year is normally completed by sometime late in the following year, but with the market tending to be irregular in the first or "1" year of each decade, as in 1901, 1911, 1921, 1931, 1941 and 1951.

3. There is a definite tendency for the


A 10-YEAR PATTERN IN STOCK PRICES

Editor's Note: We have used this chart in *Cycles* to illustrate a 10-year pattern in stock prices. The pattern will vary depending on the series and method used to compute it. Particularly, the I and VI-VII years in the decade pattern shown here vary from the time schedule developed by Mr. Gaubis.

stock market to advance in the second or "2" year of each decade, and especially in the latter part of the "2" years.

4. There is a definite tendency for the stock market to reach an intermediate peak in the early months of the "3" years, with the exact timing of the high depending in part on whether the advance started early or late in the preceding two years taken as a whole.

5. Stock market trends tend to be irregular in the "4" year of each decade, but definitely upward in the last half. These rises almost invariably carry through the "5" or fifth "decennial" year and into the "6" year.

6. The stock market almost always runs into trouble early in the sixth year, if the trend has been definitely upward in the two preceding years, but with the highs being deferred until late in the "6" year if the market had lost ground on balance during the fourth year instead of moving up sharply from the lows made late in the "3" year.

7. We should look for a decline in the seventh year of each decade unless a sufficient readjustment had occurred in the previous twelve months to bring about a definite easing of credit as well as an opportunity to buy leading stocks at 25% to 40% below their previous peaks - as was true in 1926.

8. The line of least resistance in the stock market can be expected to be upward through the eighth year of each decade, and into sometime between August and November of the ninth year.

In actual practice, we have found that these "rules" or more properly speaking, "tendencies", have had a batting average of better than 80%. When I saw Mr. Smith at his former home in Connecticut a few months ago, he confirmed this statement as being his own appraisal of the Timing factor, and said that it had by far the highest batting average, *in actual practice,* of any of the market forecasting methods he had studied in his forty years of research on the cycle. I would emphasize the phrase "in actual practice" because "hindsight" studies based on multiple covariations are misleading more often than they are helpful.

Partly because it is always important to avoid the tendency to look for a single approach which might be the answer to deciding when it is desirable to be particularly cautious about the outlook for equities in general, and (subsequently) for business activity; and also since experience has shown that the few exceptions to these Timing tendencies have logical explanations in terms of fundamental economics; I think it is highly desirable to use Timing studies as *merely one of a handful of approaches in reaching decisions as to the stock market or business outlook.* I think this is especially true in the case of those of us who are dealing with other people's money if we want to do a thoroughly conscientious job.

In order to help illustrate this talk, I have prepared copies of the charts I publish every second or third month which summarize the current position of the economic factors which I believe are especially worth watching in trying to anticipate turning points in the cycle. Figures 1, 2, and 3 show basic business series; Figures 4, 5, and 6 show the most fundamental measures of the monetary situation.

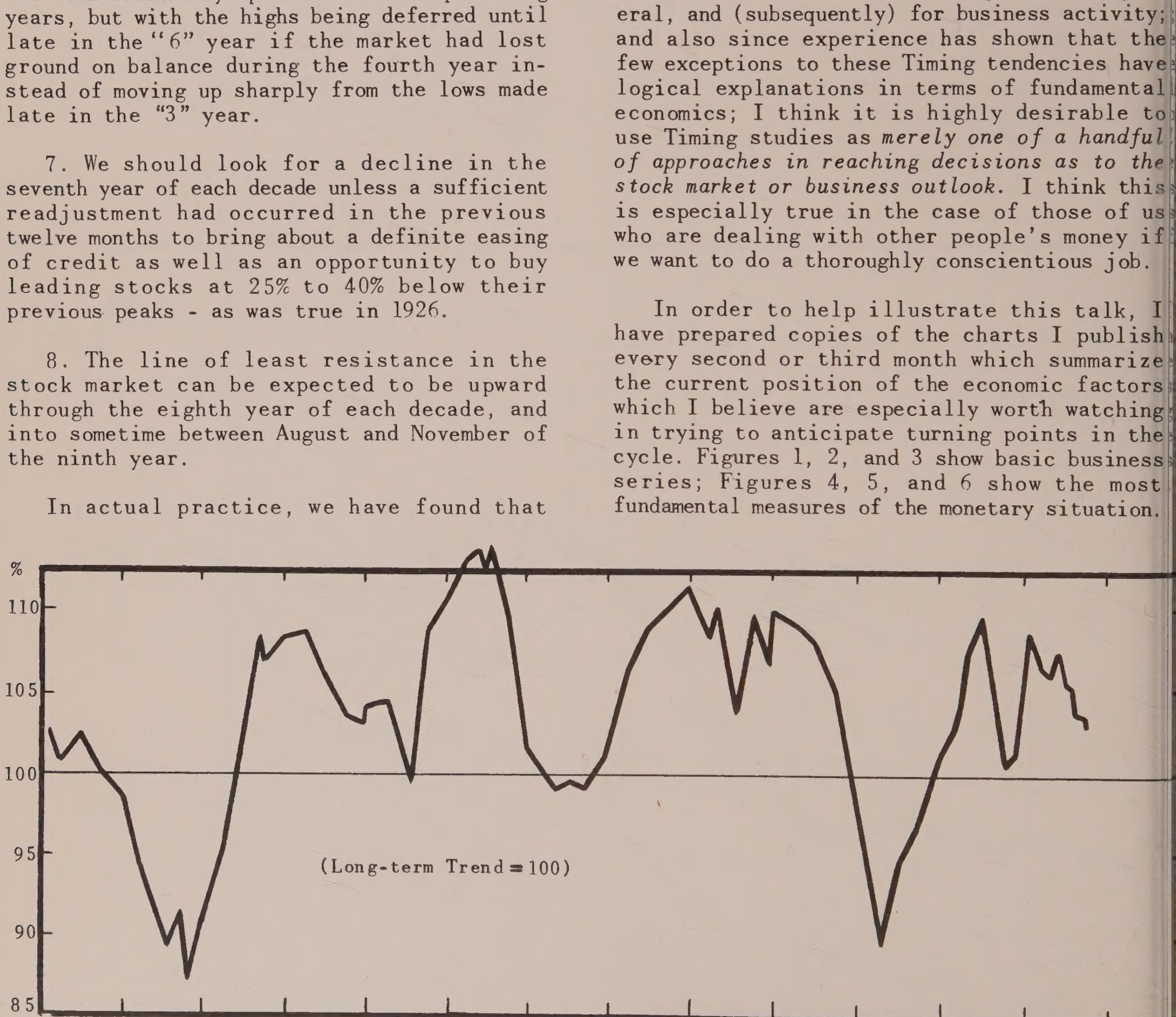


FIG. 1: FRB INDEX OF INDUSTRIAL PRODUCTION

On the large chart, Figure 7, we have plotted the record of the Standard & Poor's 425 Industrials together with the ratios of stock prices to earnings at the highs and lows for the year, based on the Dow-Jones thirty Industrial Stocks. On the bottom of Figure 7 we have given a rough indication of the Timing approach which I have just summarized.

Figure 1 shows the Federal Reserve Board's Index of Industrial Production as a percentage of its long-term trend. Conclusions based on a chart of this type depend on the reasonableness of the trend or growth line. Unfortunately, there are many crimes committed in the name of statistics, and frequently we see business curves purporting to report deviations above and below "normal" but with activity being shown as above normal for fifteen to twenty years at a time, or, conversely, being well below normal even when business inventories are rising sharply and thereby indicating that production is running in excess of consumption. The trend line we are using for the Federal Reserve Board's Index of Industrial Production represents an annual rate of growth of only about 3% which I do not believe is excessive on the one hand, or too low a rate of growth in view of the limitations resulting from the attitude of labor, as well as increasing government regulations. From a forecasting point of view—and this is something that we emphasized while I was with AT&T some thirty-five years ago—it is important to keep in mind that when business activity is well above normal, say by as much as 8% or 10%, the next change of any consequence is likely to be on the downside. Conversely, once business activity is below normal, we can expect political and other pressures to bring about a reversal of the trends which brought activity down to that level. Except during major upheavals in the economy, such as was witnessed in the early 30's, it has been a good "rule of thumb" to become cautious about the outlook for cyclical issues in particular once business activity was substantially above normal, while the burden of proof is on the bears once activity has dipped to below normal, as by that time most of the unfavorable factors have had a chance to be fully reflected in stock prices. The present indications are that business activity will be below our computed long-term trend line by either this month or next.

The chart reflecting the level of business inventories, as estimated by the Department of Commerce, also reveals a very significant aspect of the economic picture. If business inventories are rising, this means that production is running above the level of goods moving into consumption. On the other hand, a decline in business inventories reflects a favorable balance between current production and demand. The combination of the level of both business inventories and industrial production in relation to long-term normal, is usually very significant in appraising the business outlook. (See Figure 2)

Figure 3 (See page 36) reflects another important type of economic barometer, or the attitude of the consumer plus his contribution toward the demand for more or less goods than he might be justified in purchasing on a cur-

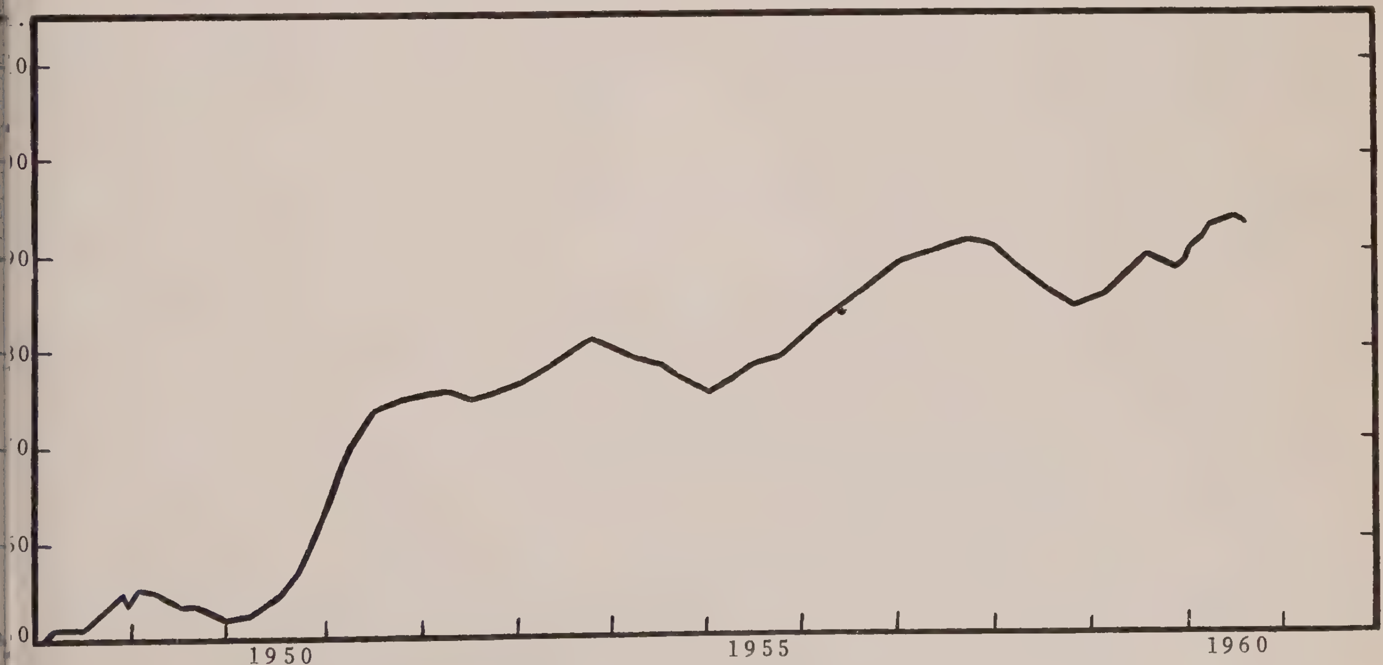


FIG. 2: TOTAL BUSINESS INVENTORIES

rent basis. A prolonged period of a higher level of spending as compared with repayments, tends to weaken the economy, but once repayments start to exceed new purchases, the indications of this type of data are reversed.

On Figure 4 of this set of charts we show the fluctuation in Net Bank Reserves, one of the most significant series reflecting the easiness or tightness of credit. Experience has shown that when the Federal Reserve Board has been pursuing a policy of tightening credit to a point where the banks must resort to "borrowed reserves", any upward trend in the stock market is likely to end within six to nine months. On the other hand, there is usually a fairly prompt reaction to the changeover to free reserves - with the market tending to advance within a few months of this type of development. Since the banking system has been enjoying a fair supply of "free reserves" starting in July, this particular type of statistic has been pointing in a favorable direction in the very recent months.

The Federal Reserve Board's rediscount rate as shown by Figure 5 is another way of judging Federal Reserve policy. One of my own discoveries, which has not been widely publicized as yet, is the fact that whenever the rediscount rate is brought up to double the level prevailing at the previous cyclical low, it is a good idea to start thinking in terms of reducing stock holdings. This type of warning signal was given in early August, 1929, when the rediscount rate was brought up to 6% as compared with the 1924 level of 3%. When the rate was forced down to 1 1/2% in 1931, there were signs that the stock market readjustment had run its course. However, within a matter of a few weeks the rediscount rate was brought up to 3 1/2% and the stock market again turned downward.

Following the extremely low money rates of the war period, when the rediscount rate was 1/2 of 1%, there was an advance in this charge to the banks on borrowings from the Federal Reserve, to 1% in early 1946. Shortly thereafter the market reached a high which was not to be witnessed again for four years. After staying at 1% until 1948, there was a rise in several stages to 2% by early January, 1953. That month marked the high in the stock market for that year with a reversal in the cyclical trend developing only after a complete reversal of the policies of the Federal Reserve Board in June.

As shown by the stars on this chart, the rediscount rate was brought up to double the previous cyclical low in early 1956, and in the early summer of 1959. So far the additional rise in the Dow-Jones Industrial Average following this type of warning that maladjustments are developing in the economy, has been less than 6 or 7%.

The last chart of this group has to do with government deficit spending. We hear a great deal about how any increase in government spending is supposed to be bullish on business and the stock market, without paying any attention to the fact that this may not be the case at all. I contend that it doesn't matter very much to the economy as a whole whether the government spends $20 billion or $50 billion - or at least this is not nearly as important as whether the spending is *in excess of* or *below* the level of tax collections. If the government were to spend only $20 billion, but let its citizens spend all their own incomes, instead of having a good part of them taken away in taxes, this would be much more stimulating to the economy than spending $50 billion after taking away $60 billion from individuals in taxes. After all, money taken

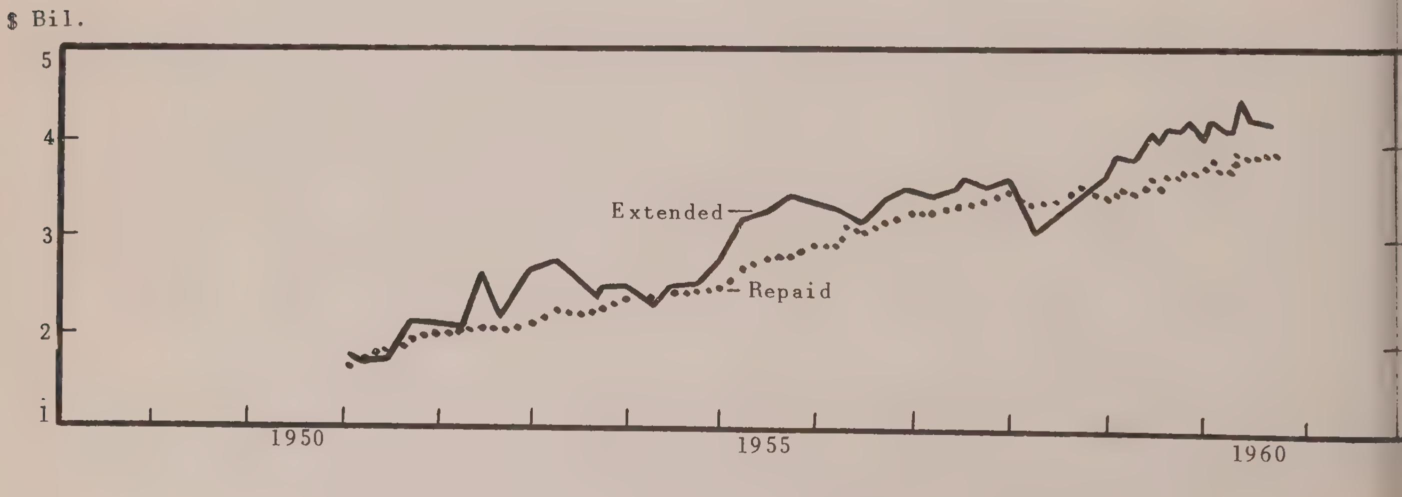


FIG. 3: INSTALLMENT CREDIT EXTENDED AND REPAID

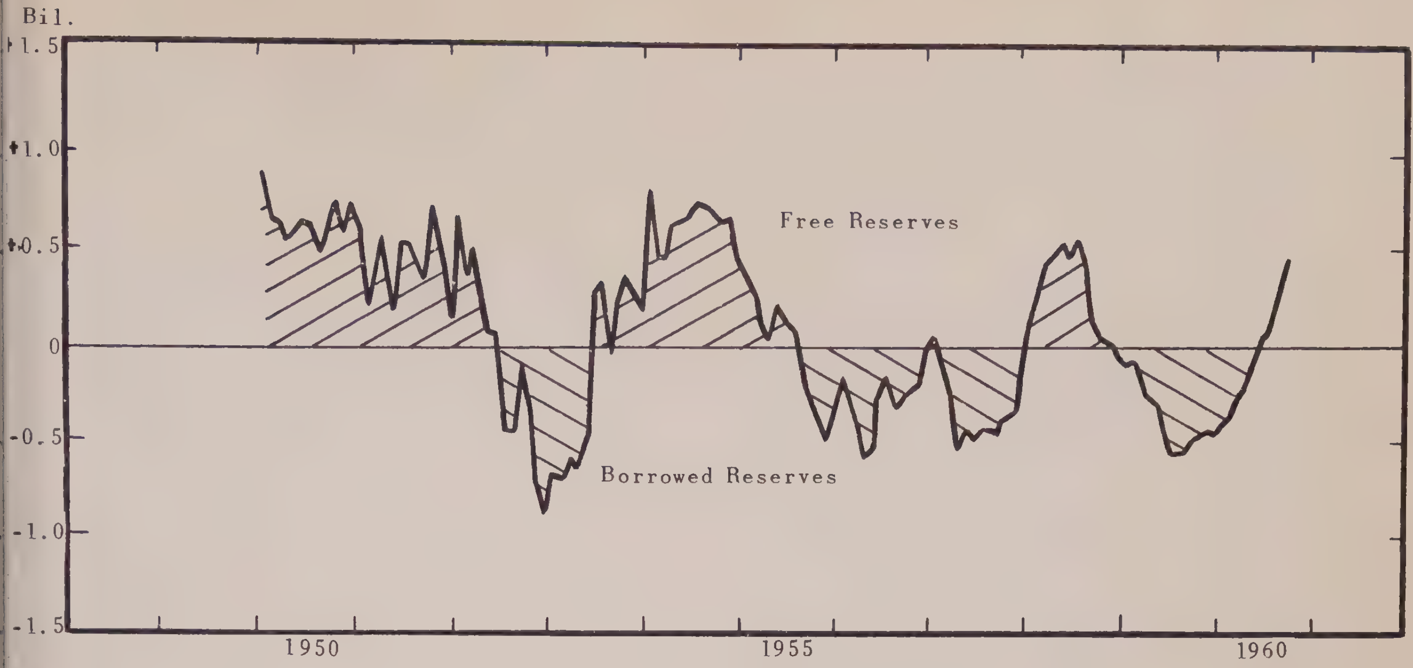


FIG. 4: NET BANK RESERVES

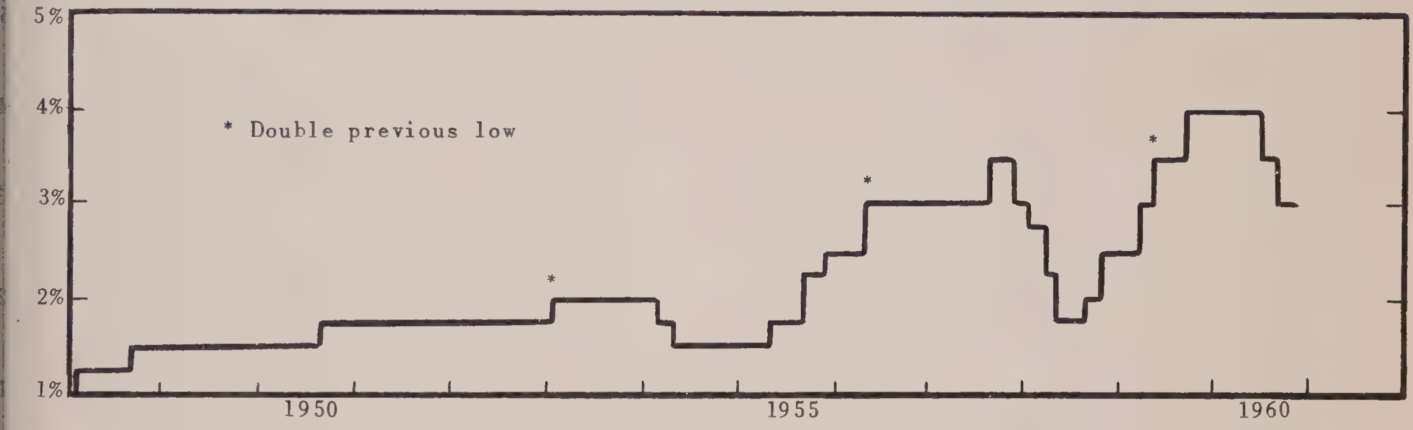


FIG. 5: FRB REDISCOUNT RATE

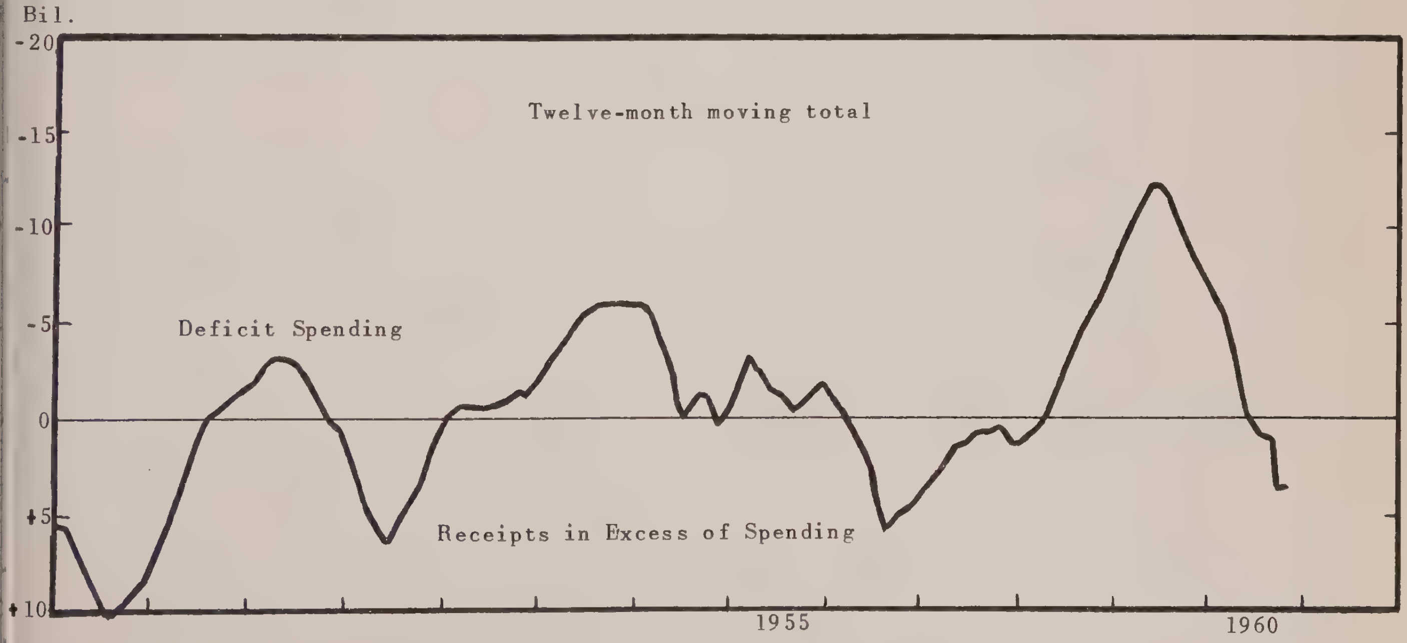


FIG. 6: FEDERAL EXPENDITURES IN RELATION TO RECEIPTS

away from us in taxes can have the same degree of *adverse* effect on the economy as government spending can act as a stimulant. On this chart we show a twelve-month moving total of government spending in relation to tax collections. The slowing down of the twelve-month moving total of deficit spending in 1953, and the subsequent sharp decline, helped to explain the business recession in 1954, just as the downturn since the summer of 1959 helps to explain the recession now in progress. In interpreting this chart, it should be kept in mind that a twelve-month moving total turns downward once the current month's figures are below those of twelve months earlier, with the reverse being true if the figures for the current month are above those for the same month in the preceding year. With this in mind it might be noted that the adverse influence of tax collections in excess of the sums being spent by the government in 1956 was not reversed, on a twelve-month basis, until early in 1958. As things look today, the probabilities are that government spending will be on a deficit basis for a twelve-month period by about the middle of 1961 - give or take a few months.

Figure 7 (See Pages 40 and 41)

In connection with the double chart shown on the next pages, there are several points which might be worth noting. In the first place, when our Timing cycles indicated by the beginning of 1946, that it was time for caution, stocks had been selling at rather high ratios to earnings both in the preceding year and at what proved to be the highs for 1946. For this reason, plus the fact that the rediscount rate had been brought up to double the previous cyclical low in January of that year, the indications of lower stock prices before the end of 1946 were especially strong. This was true even though the prevailing opinion at that time was that the stock market simply could not go down in view of the large pent-up demand for peace time goods.

In 1949, however, stocks were very cheap in relation to earnings at the time of the "warnings" given by the Timing approach. Even at the highs for the year in 1948 and 1949, the Dow-Jones Industrials were selling at only about 7 times earnings - an extremely low level as judged by the record for as far back as data are available. At the same time, we had very large "free" bank reserves, and while the rediscount rate had been increased in late 1948, it was still at well below the level at which a warning signal could be construed. The 1949-1950 period happens to provide one of the glaring exceptions to the tendency for the stock market to decline during certain periods, as I have previously outlined. The level of stock prices, the monetary situation, and also the fact that business activity was well below indicated long-term normal - with inventories also declining, made this particular "Timing" selling indication really questionable, and quite rightly so, as things turned out.

In contrast, the warning signals given by the Timing approach in early 1953 were confirmed rather than contradicted by the level of bank reserves, the increase in the rediscount rate at that time, and the fact that business activity was substantially above normal. The same thing was true of the 1956 period as can be seen by a quick review of these charts.

At the present time, our Timing cycles tell us that the worst and possibly all of the decline in the market as a whole has been recorded. This conclusion is likely to be supported by the Federal Reserve Board's Index of Industrial Production, if it should merely decline by an additional 2 or 3 points in November and/or December. The bank reserve statistics have already given favorable signals, as has the fact that business inventories have started to turn down. The one big question which might be raised as a result of these developments is whether stocks are not abnormally high in relation to earnings. This is certainly true judging by the Dow-Jones figures by themselves, but a breakdown of the Dow-Jones Average shows that it is currently being artificially held up by three or four of the so-called depression proof stocks, which are now enjoying about the same degree of excess popularity as was witnessed in the aluminum, copper and oil stocks in 1957, when this average had been artificially held up as a result of strength in these issues based on the cry that any stock was attractive if it represented a company which had "assets in the ground."

In my opinion, the high level of stock prices in relation to earnings helps support the conclusion which might be drawn from our Timing cycle studies. These indicate that a moderate advance should be expected into or through the early months of 1961, from whatever lows are touched in the final quarter of this year. The stock market is not likely to get too far at this time, expecially in terms of the Dow-Jones Industrial Stock Average, if we may judge by both the past record of Time cycles and the current high ratio of prices to earnings for the issues which dominate this average.

I believe it will be especially necessary to reappraise the outlook very carefully by the spring of 1961, and possibly eliminate from portfolios stocks selling at unusually igh premiums for popularity. From a timing oint of view, however, we can expect higher tock prices by early 1963, with the extent f the subsequent setback depending upon the tatus of the various barometers shown on he charts before you. I might add that I elieve any projection, particularly as to rice levels, should be in terms of today's old dollars. If the price of gold should be ncreased next year, as some people seem to xpect, we could have an advance comparable to hat following the setting of a new price for old in 1934, when the majority of stocks rose y more than 100% by November 1936, but when he New York Times Industrial Stock Average eached a high which was not to be exceeded or fourteen years.

In closing, I want to emphasize these oints:

1. In my opinion, the record of how this oncept of three overlapping ten year cycles as worked *in actual practice* over the past hirty years justifies including this approach n points to be considered in making business r stock market predictions.

2. In view of the desirability of differntiating between *"correlation"* and *"covaration"*, there is room for a great deal of dditional work of the type Mr. Edgar L. Smith nd your Foundation are doing in trying to ind the causal relationship between various orces in nature and their possible influences n the economy.

3. The Timing studies I have outlined have to do with the "lines of least resistance" in the stock market during certain periods, but have little bearing on *the extent* of any changes in equity prices - which can be greatly influenced by decisions made by a handful of bankers or political leaders.

4. I believe it is always wise to double-check any conclusions drawn from a single approach, such as is represented by these Timing studies. My own experience over the past thirty-five years suggests that the level of business activity in relationship to long-term growth or "normal", and changes in the supply (and costs) of credit, can be particularly helpful in deciding when to look for the infrequent but always possible exceptions to the Timing indications.

5. It is vitally important that we try to find ways and means of anticipating turning points in mass psychology and reversals in cyclical trends in stock prices, if we want to do our bit to help stabilize the economy. The studies I have outlined all have this objective in mind. To the extent that we choose to go along with "follow the crowd" approaches, such as the Dow Theory, we should face the fact that we are helping to exaggerate the swings in the cycle, and thereby are contributing to certain forces which are accelerating our drift towards Socialism.

December 14, 1960 Anthony Gaubis

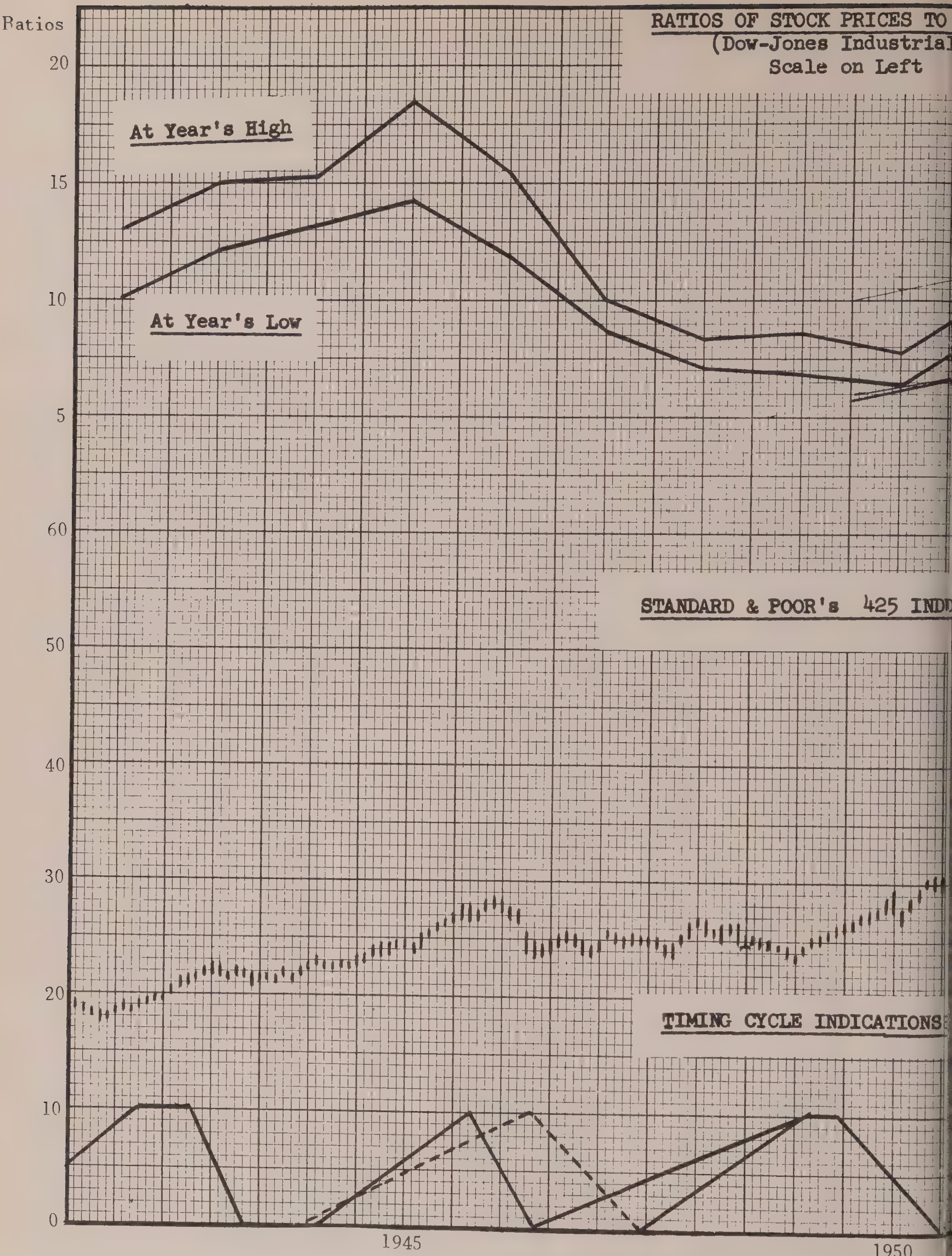
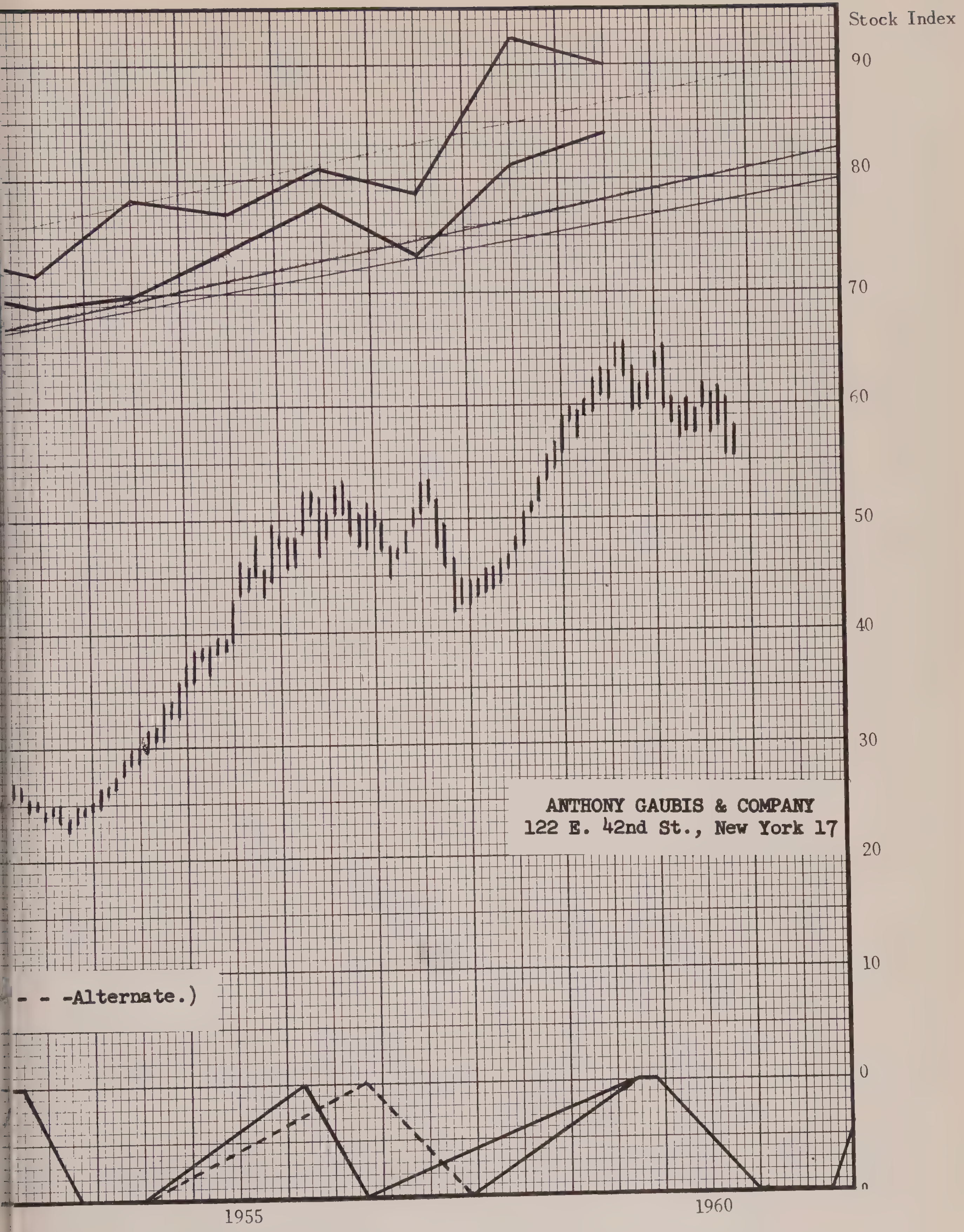


FIG. 7: THE STOCK MARKET



ANTHONY GAUBIS & COMPANY
122 E. 42nd St., New York 17

Time and time again. . .

BY GUSTAV GUMPERT

What Time Are You?

The November issue of the *Proceedings of the National Academy of Sciences* reported that the human body harbors a host of "clocks" in joints, brain and other organs that keep time in units ranging from 12 hours to several years.

The article is by Dr. Curt P. Richter, who says that a study of 500 patients whose symptoms have occurred with clock-like regularity convinced him of the presence of true internal clocks in the body. Here are some of the cases cited:

The temperature chart of a 19-year-old girl reached peaks every 12 hours, but studies failed to explain the fever. An 18-year-old girl suffering from a food allergy operated on a 24-hour temperature cycle. Temperature and pulse rates of an 8-year-old boy measured time in 48-hour intervals. A 43-year-old man had regular swellings of the right knee every 9 days.

Mental and emotional symptoms were also found to vary in cycles ranging from 24 hours to several years.

"Evidence at hand," says Dr. Richter, "indicated that the 24-hour clock—which is found not only in man but in other animals, birds, insects and plants—is the most primitive clock. How and when the other clocks appeared in different animals, what significance and selective value they had in the life of the animals, remains unknown."

Speaking of cycles in human moods and physical condition reminds us again of *biorhythm*. We have just received a letter from Mr. George S. Thommen, the man behind the biorhythm computer, offering to give us a test run showing ups and downs for the next four months.

We have accepted this kind offer, and will give you a subsequent report on how it seems to work. You'll recall that the biorhythm system is based on three cycles: 23-day, physical; 28-day, emotional; 33-day, intellectual. Mr. Thommen's computers do the work of advancing these cycles from the time of your birth.

According to the theory, there are certain "critical" times when physical condition, mood and mental ability are not at their peak.

Hepatitus Cycle

There is evidence that 1960 was a "hepatitis" year. Outbreaks of infectious hepatitis, a virus disease that attacks the liver, struck throughout the U. S., with the highest case totals in New York, California, Ohio and the Mountain States.

Caseloads are expected to increase until March and to reach an estimated total of 50,000. The disease appears to occur in six-year waves—but the reasons for this are unknown to medical science. The last major hepatitis year was 1954.

Seasonal Painting

Cleta Olmstead Boughton, Ph. D., archaeologist and art historian, holds the theory that painters work best in cold, wet environments.

In an article published in the *Journal of Human Ecology,* she points out: "During the cold-wet times in the past five hundred years the graphic arts have appeared in Europe; throughout succeeding long cold-dry periods they have remained important. Once discovered and utilized, even during intermediate warm phases they have often been retained, though less emphasized." The warmer the weather, she says, the more dormant the graphic arts.

The Price Of Land

The Urban Land Institute has prepared a chart showing cycles in the price of real estate, which, if we read it rightly, suggests that now is the wrong time to be buying land. It looks like real estate prices have reached a cyclical high and are about to turn downwards.

Land & Home, a real estate magazines, comments: "Suburban prices have been going up for 27 years now—longer and higher than they have ever gone up in all our history. They are now overdue for a fall."

The Market Place

The cycle theory for anticipating market changes shows the following indications for balance of December and for January (This is written on December 18): December 22, decline; January 5, rally; January 29, sharp downturn.

HE YEARLY CYCLE IN CARRIER COMMON:

WILL IT WORK IN 1961?

by Gertrude Shirk

Since 1951 the most important single factor n the price of Carrier Corporation common tock has been a yearly cycle. Over the nine ears for which we have figures, 1952 through 960, it has worked eight times.

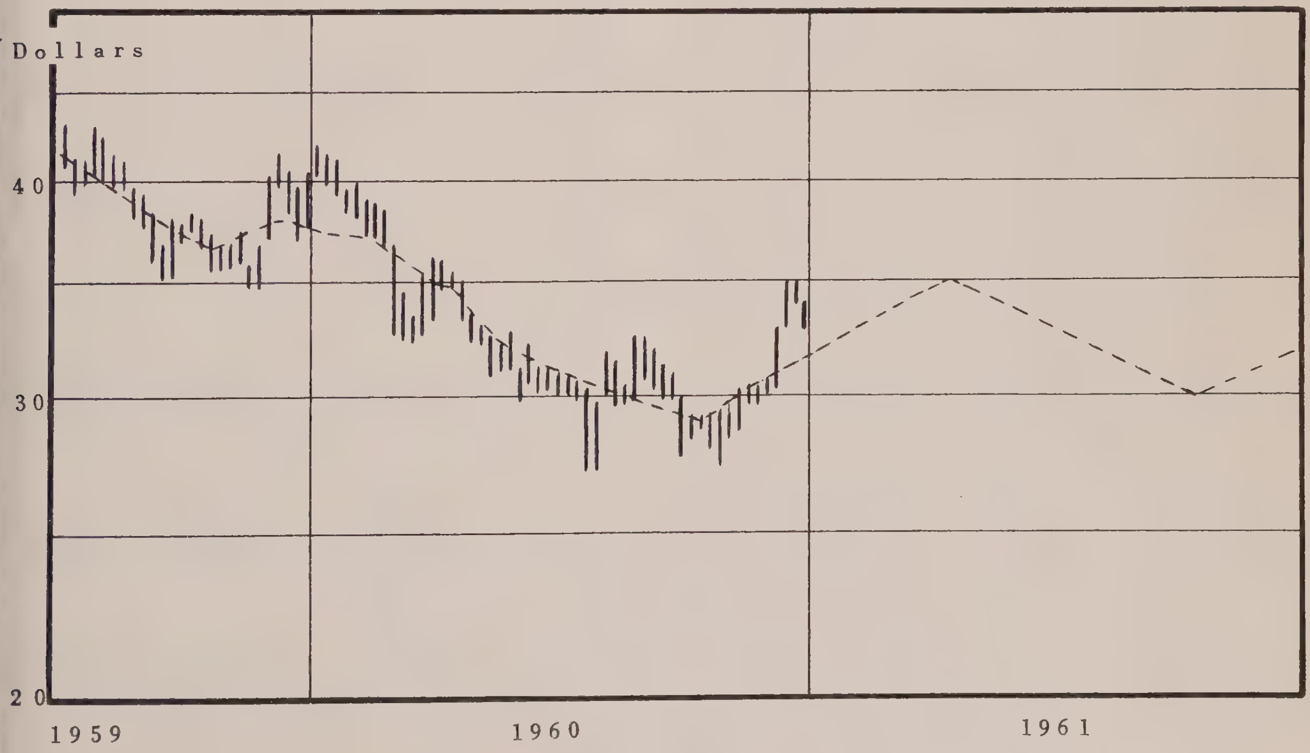
On the average, the high of this yearly ycle comes between the 15th and 16th weeks f the year, and the low comes between the 1st and 42nd weeks of the year. These dates re not the highs and lows in any given year, ut rather are the center points around which he highs and lows of the cycle have occurred.

Using these dates as trading points for he 1952—1960 period would have been very rofitable. The only losses would have occurred In 1958. But this is hindsight. Before I proeed farther in describing this cycle, and efore any projections are considered, I want to list some of the necessary qualifications. Then perhaps you will not be over-impressed with the practical possibilities of this cycle.

First, there are only nine repetitions of this cycle. It is true that of these nine, eight are "good". That is, in eight cases, the actual and ideal cycle follow about the same contour. Nevertheless, we like about at least 15 or 20 repetitions before we begin to consider any cycle as significant.

We cannot say that this cycle is significant, or that it is a real cycle, or that it will continue. We do not know what causes this cycle. Until cause is known, it is impossible to say whether any cycle will continue.

Second, our data go back only to 1951. It would be very helpful to have data which go



IG. 1: CARRIER CORPORATION COMMON STOCK PRICES — WEEKLY HIGH AND LOW VS COMBINED YEARLY CYCLE AND TREND

much farther back so that whether or not the cycle was present prior to 1952 could be checked out.

Third, because we have so few repetitions, it is impossible to get a more precise length. We are using the generality, "yearly cycle." The cycle may be longer, or it may be shorter than 52.25 weeks. Of course, for our purposes, this lack of precision is not immediately important.

Fourth, in years when there is an important change in the underlying trend of these figures, the cycle will be overwhelmed by the trend. Over the period we have studied the data, the cycle has been of primary importance, and the trend has been of secondary importance. But the relative importance of these two factors can change at any time.

If you want to project the work into the future, the cycle is automatically extended forward according to the way it operated in the past. The level of the underlying trend around which the cycle fluctuates becomes the real problem.

The broken line on Figure 1 shows the cycle combined with an assumed underlying trend. It is compared to the actual weekly high and low price of Carrier stock. The 1961 extension assumes practically no change in the level of trend from its current position. If the trend turns upward in 1961, the line will tilt upward. If the trend turns downward in 1961, the line will tilt downward.

The manner in which the extension into 1961 is computed is shown for selected weeks in the table which follows.

TABLE 1: CARRIER CORPORATION COMMON STOCK

1961 Extension of Yearly Cycle and Assumed Trend.

Week Ending Friday	Yearly Cycle % of Trend	Assumed Trend	Trend & Cycle
January 6	99.08%	$32.06	$31.97
February 17	102.80	32.28	33.18
March 24	105.90	32.36	34.28
April 21	107.90	”	34.91
June 2	104.00	”	33.65
July 7	100.90	”	32.66
August 11	97.95	”	31.70
September 15	95.06	”	30.76
October 13	92.68	”	30.00
November 24	95.50	”	30.90
December 29	98.40	”	31.84

This table is not intended as a forecast of what is going to happen in 1961—it shows what the result will be for a given set of circumstances. If the circumstances change the resulting price (i.e., trend and cycle will change. For example, if the trend wer to go down to about $26 in the early part o the year, the peak would be wiped out. Or, i the trend toward the end of the year were t go up to $38 the low would be erased.

So, although the yearly cycle over th 1952—1960 period has been fairly reliab and important, a sound opinion about what wil happen to the underlying trend should greatl increase the usefulness of the cycle.

Table 2 on the next page shows the resul of trading on this cycle. First it shows th highs and lows of the yearly cycle alone together with the average weekly price at th times of high or low, and the resulting profit or loss from action based on this cycle.

The second part of the table adds the tren to the cycle to obtain the times of high an low, and repeats the process on this basis The fact that trend is also taken into consideration in the second part of the table increases the profit about 35%.

Not only is the trend important as a plus factor in increasing profit, but a sound opinion about trend will help prevent losses i case the cycle does not operate in the future as it has in the past.

Figure 2 on pages 46 and 47 shows the price record for Carrier from the week ending October 26, 1951 through the week ending December 30, 1960. The underlying trend as it developed over this period is also shown on the chart. From this chart you may obtain your own idea of what direction trend may take in 1961.

You will also see on the chart traces of a short cycle in the neighborhood of 17 weeks. We began work on Carrier by looking for the 17-week cycle, and indeed found that it was present. (The exact length over the period shown is 17.61 weeks.) However, the amplitude is so small that as a practical matter it is not worth showing.

The amplitude of the yearly cycle is large enough (108% of trend at highs, 92.5% of trend at lows) that the cycle can be seen by an inspection of Figure 2.

The amplitude is also large enough to have made the paper trading on this cycle profitable *in the past*. How it will operate in the future is in the hands of the traders. I want to end with a cheerful note to add to the list of qualifications given at the beginning of the article: a general knowledge of this cycle could have the effect of wiping it out!

Table 2: Carrier Corporation Common Stock

Profit or Loss on Yearly Cycle, 1952-1960

A. Based on the Cycle Alone

	Date of Turning Point Week Ending Friday	Average Weekly Price	Profit or Loss Short Transaction	Long Transaction
High	April 11, 1952	$26.19		
Low	October 10, 1952	29.38	$-3.19	
High	April 17, 1953	41.44		$12.06
Low	October 16, 1953	38.50	2.94	
High	April 16, 1954	61.44		22.94
Low	October 15, 1954	49.75	11.69	
High	April 15, 1955	63.44		13.69
Low	October 14, 1955	49.44	14.00	
High	April 13, 1956	57.63		8.19
Low	October 12, 1956	55.50	2.13	
High	April 12, 1957	60.44		4.94
Low	October 11, 1957	38.00	22.44	
High	April 11, 1958	36.81		-1.19
Low	October 10, 1958	40.50	-3.69	
High	April 17, 1959	45.69		5.19
Low	October 16, 1959	37.31	8.38	
High	April 15, 1960	35.00		-2.31
Low	October 14, 1960	29.00	6.00	
		Net Profit	60.70	63.51
				124.21

B. Based on the Cycle Combined with the Underlying Trend

	Date of Tunring Point Week Ending Friday	Average Weekly Price	Profit or Loss Short Transaction	Long Transaction
(No High)				
Low	January 11, 1952	22.38		
High	April 24, 1953	41.00		18.62
Low	September 4, 1953	38.50	3.50	
High	April 23, 1954	61.06		22.56
Low	October 15, 1954	49.75	11.31	
High	April 15, 1955	63.44		13.69
Low	October 14, 1955	49.44	14.00	
High	April 20, 1956	57.56		8.12
Low	October 19, 1956	55.13	2.43	
High	April 12, 1957	60.44		5.31
Low	December 27, 1957	32.00	28.44	
High	July 18, 1958	42.00		10.00
Low	October 10, 1958	40.50	1.50	
High	April 17, 1959	45.69		5.19
Low	October 23, 1959	36.31	9.38	
High	December,11, 1959	40.50		4.19
Low	September 23, 1960	30.31	10.19	
		Net Profit	80.75	87.68
				168.43

Note: Profit and Loss figures are before costs, taxes, dividends on short side, and assume short sales were possible; figures do not include dividends received on the long side.

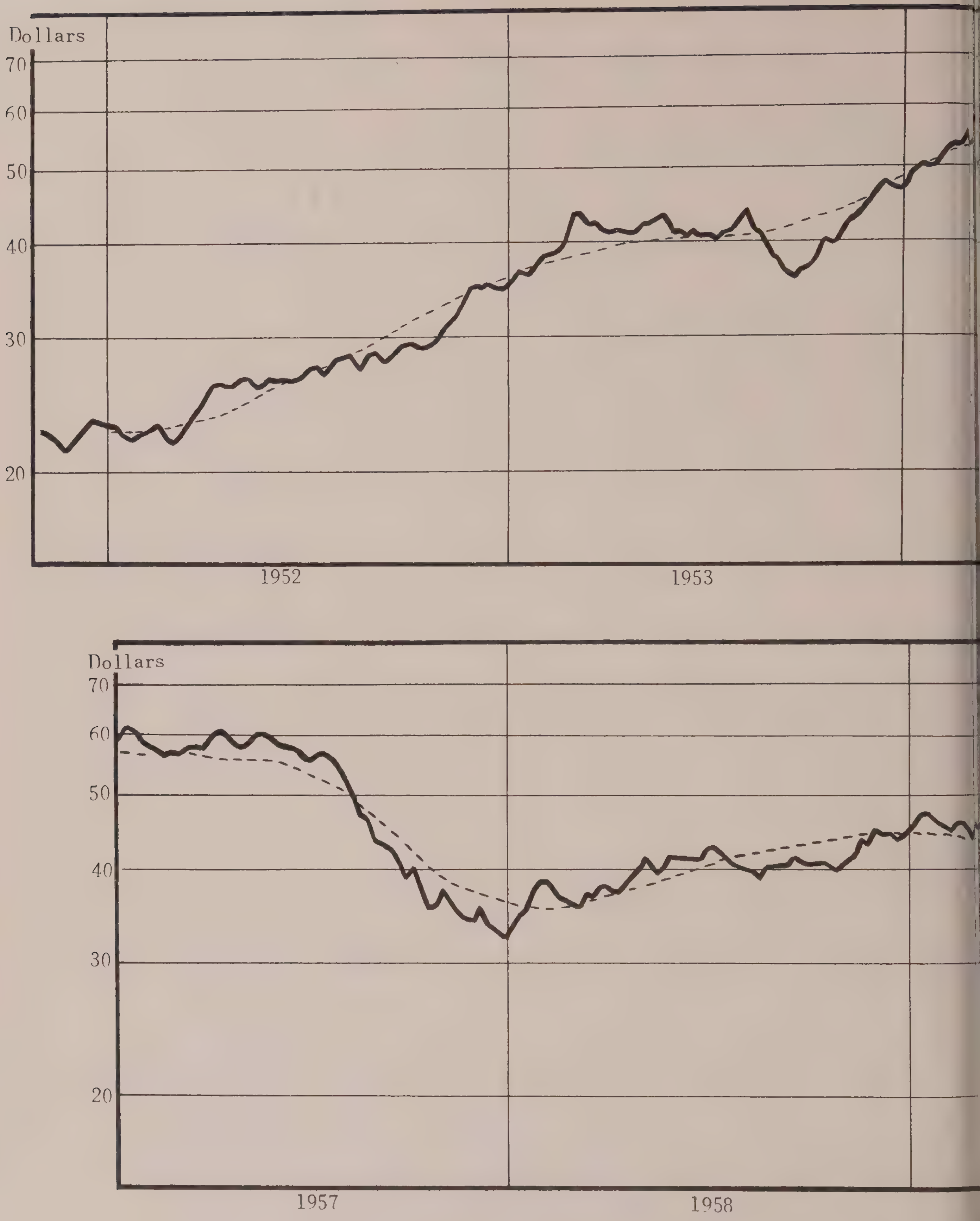
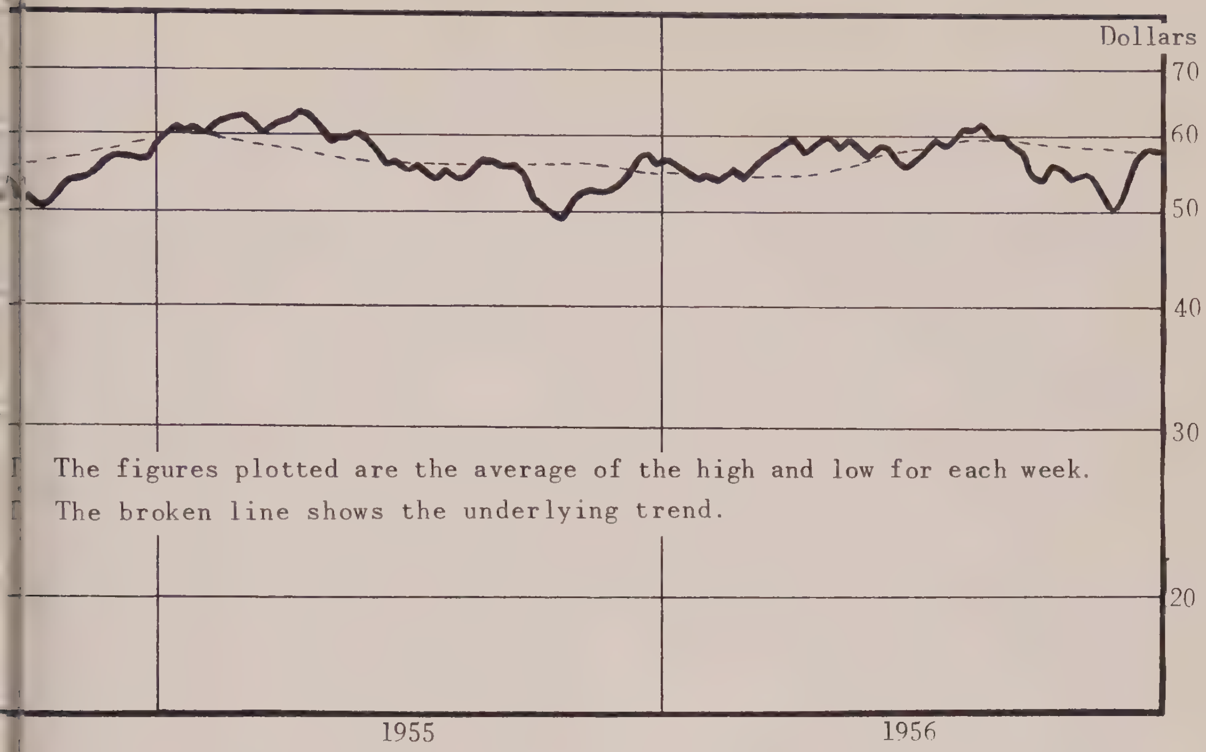
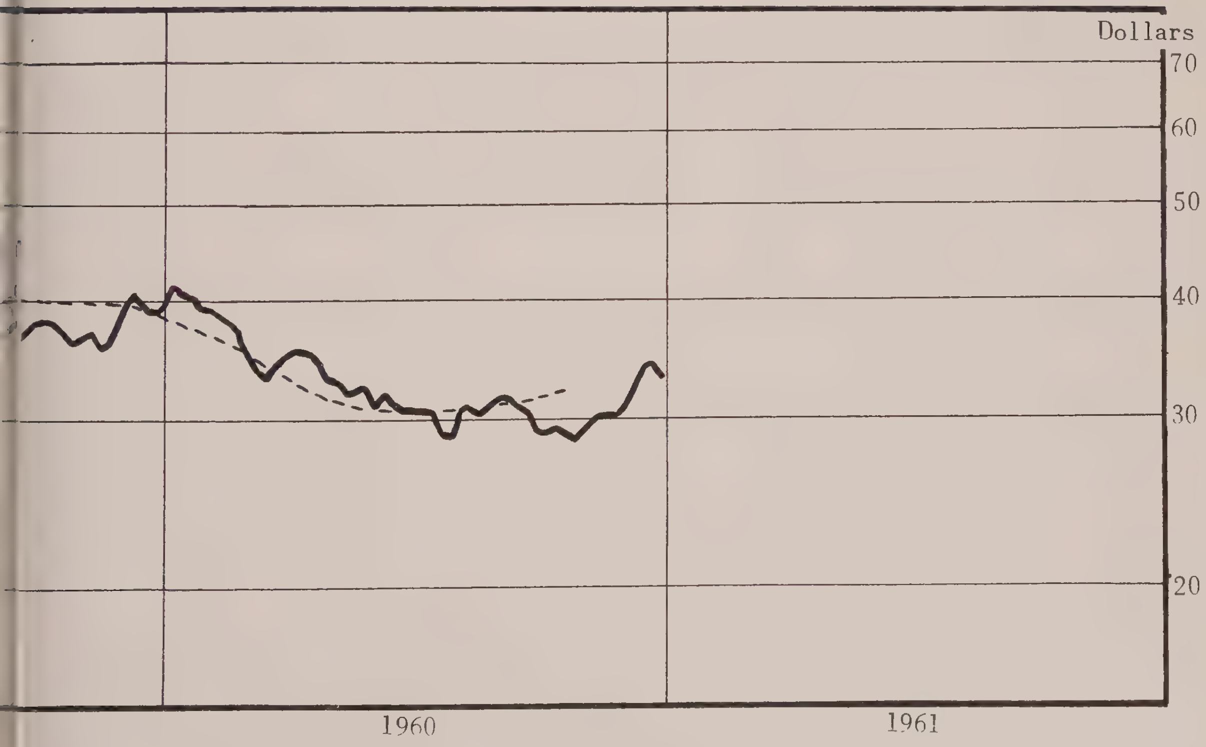


FIG. 2: THE WEEKLY RECORD OF THE PRICE OF CARRIER CORPOR



The figures plotted are the average of the high and low for each week.
The broken line shows the underlying trend.



STOCK

LETTERS:

Computers

Dear Mr. Dewey:

At the risk of making a suggestion which will probably appear elementary, I am going to ask whether full attention has been given to the utilization of computer programming. It would appear to me that where superimposed cycles of varying lengths are being examined in a number of phenomena, a computer setup could probably be economically applied, and would permit the handling of large quantities of data in a very short time.

Akron, Ohio R. P. Dinsmore

Comment: Computer programming would be excellent for finding cycles present on the average in a large variety of things but this is not really our problem. We can find all the cycles we want without any trouble.

Having found cycles present on the average in a series of figures, the next problem is to see if they are *rhythmic* — that is if they repeat with a beat — or whether they are present merely as a result of the averaging process.

The next step, and this would be the limiting factor, is to work up the information thus obtained into shape for publication.

All this is interesting and valuable but we have been doing it for twenty years and have accumulated enough facts of this sort so that the emphasis should now be changed to learning *cause* and *laws*. We know for example there is a 9.2-year cycle in stock prices but unless we know what causes it, we won't know when it is going to crest early, or late, be strong, or weak, or vanish altogether. When we know causes and laws, we can hope to know things like this also.

E. R. D.

The Goof Department

Dear Sirs:

In the December 1960 issue of *Cycles* the figure "10,000 head" on page 271 should read 1,000,000 head, and on Page 272 "45,000 head" should read 4,500,000 head.

No doubt you have already had a hundred letters about it! Everybody who reads the article will correct it as I did, so no harm done. It is an excellent article.

Gardner Turrill

Comment: Thank you for your generous attitude.

G.S.

The Decennial Pattern

Dear Mr. Dewey:

I am somewhat disturbed by recent letters and other comments in *Cycles* which refer to "Smith's Decennial Pattern" as if, at any time, I had regarded this pattern as anything but a tool for further study.

As long ago as 1947 I wrote; "The Decennial Pattern, which we have seen in economic series, and which we shall now find exists in weather data, does not tell the whole story; but it has proved to be a useful tool, in that it is a composite of three, at least, of the better known cycles, and leaves us free to examine the effect on this pattern of cycles of other periodicity."

Both before and after 1947 I have studied mainly how divergencies from this average "Decennial Pattern" may be anticipated through the use of weather data at times, and at others through (longer term cycles).

These studies, as you know, have been collected, and form the substance of my current book, *Common Stocks and Business Cycles.* (Editor's note: William Frederick Press. 391 East 149th Street, New York 55, New York. $10.00.)

The point of this letter is that the "Decennial Pattern" is just a point of departure for more rewarding studies and I hope that none of your readers will be disposed to use its average bahavior as a basis for any prognostications—I do not.

Wayne, Penna. Edgar Lawrence Smith

HE GEISINGER INDICATOR

anger signal repeated:

The Geisinger Indicator has again given a anger signal (-2.20 for August, 1960). This s the third time in 1960 that the Geisinger ndicator cut -2.00 going down. (An earlier anger signal occurred in 1959 because of ne steel strike, but it was not taken too eriously).

The first 1960 danger signal occurred in anuary. It was reported to you in my letter f May 25. *Nothing that I know of gave you as ich advance notice of the present setback in roduction as the Geisinger Indicator.* (The onth of May, at the time we told you of the anger signal, was the second single highest onth of production in our history).

The second danger signal came in March. I old you about it in my letter of July 27th.

Now for the other Indicators:

The *First Difference* Indicator went down rom -1.33 in September to -1.67 in October.

The Modified Geisinger Indicator for August pril 1961 when advanced)went down to -3.20. s you know the Modified Geisinger Indicator is merely the sum of the Geisinger Indicator and the First Difference Indicator.

Actual production, as measured by the Federal Reserve Board's seasonally adjusted Index, stood at 159 in November, down 5% from May levels. May was the real peak of the recent boom.

A 5% drop is important, particularly to those directly injured by it; but you must remember that 159 is still a very high level of production. In fact, despite the slump at the end of the year, 1960 was the most productive year in our history. *Don't lose your sense of proportion.* It is not sensible to expect that *any* series of figures will go up and up forever and ever.

Three danger signals in a row cannot be ignored. Wait for the Geisinger Indicator to cut plus 2.00 going up before you can be sure that the current setback is over. Plus 2.00 will come eventually, but as of now I cannot say when.

December 28, 1960 E. R. Dewey

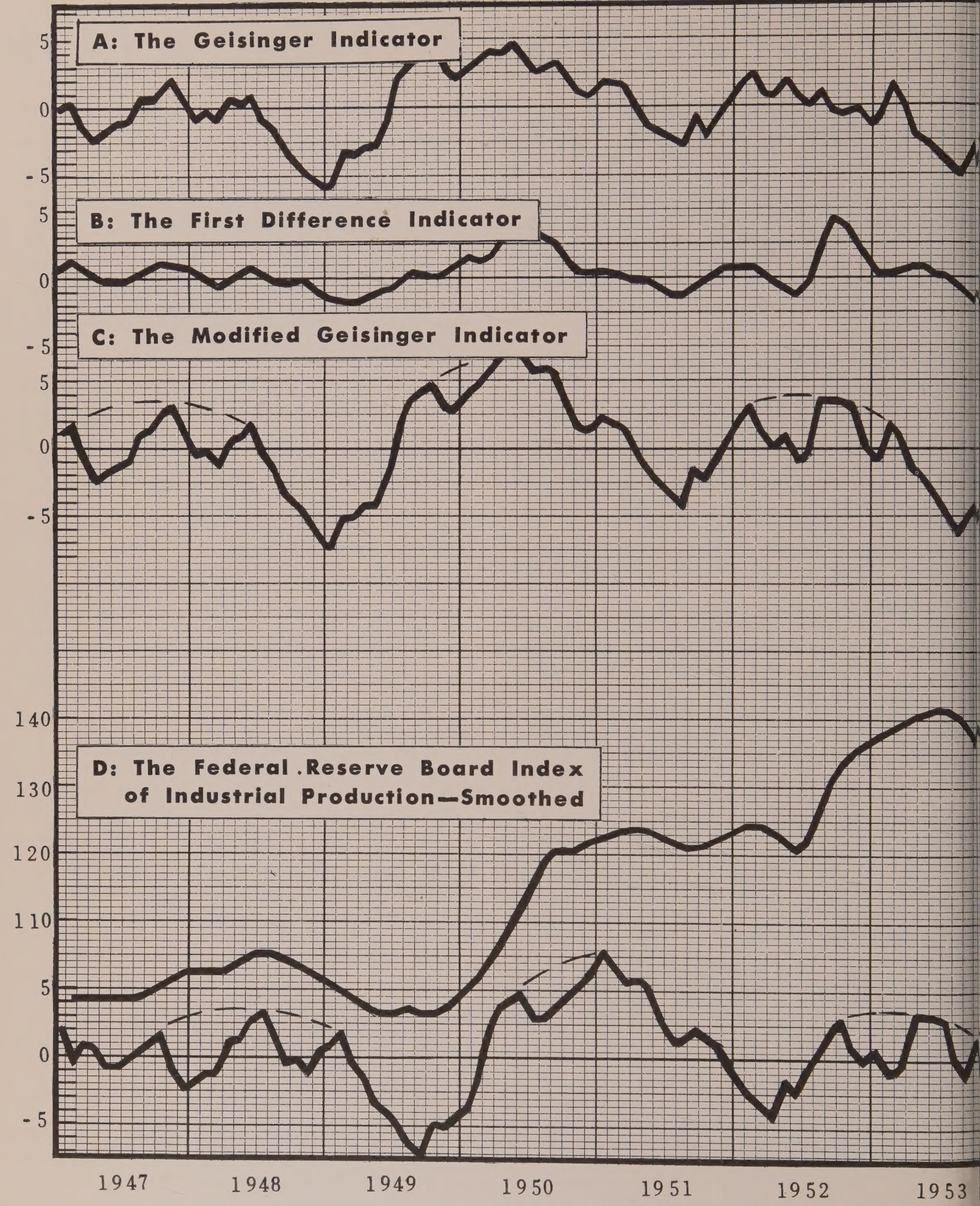
ne recent figures:

Month	F.R.B. Index	Geisinger Indicator	First Difference Indicator	Modified Geisinger Indicator	Timing Advanced 8 Months
Mar-1960	166	-2.20 D.S.	-0.33	-2.53	1960-Nov
Apr	165	-2.00	-0.33	-2.53	Dec
May	167	-0.20	0.16	-0.04	1961-Jan
Jun	166	0.20	0.17	0.37	Feb
Jul	166	0.00	-0.17	-0.17	Mar
Aug	165	-2.20 D.S.	-1.00	-3.20	Apr
Sep	162	*	-1.33	*	May
Oct	162	*	-1.67p	*	Jun
Nov	159p	*	*	*	Jul

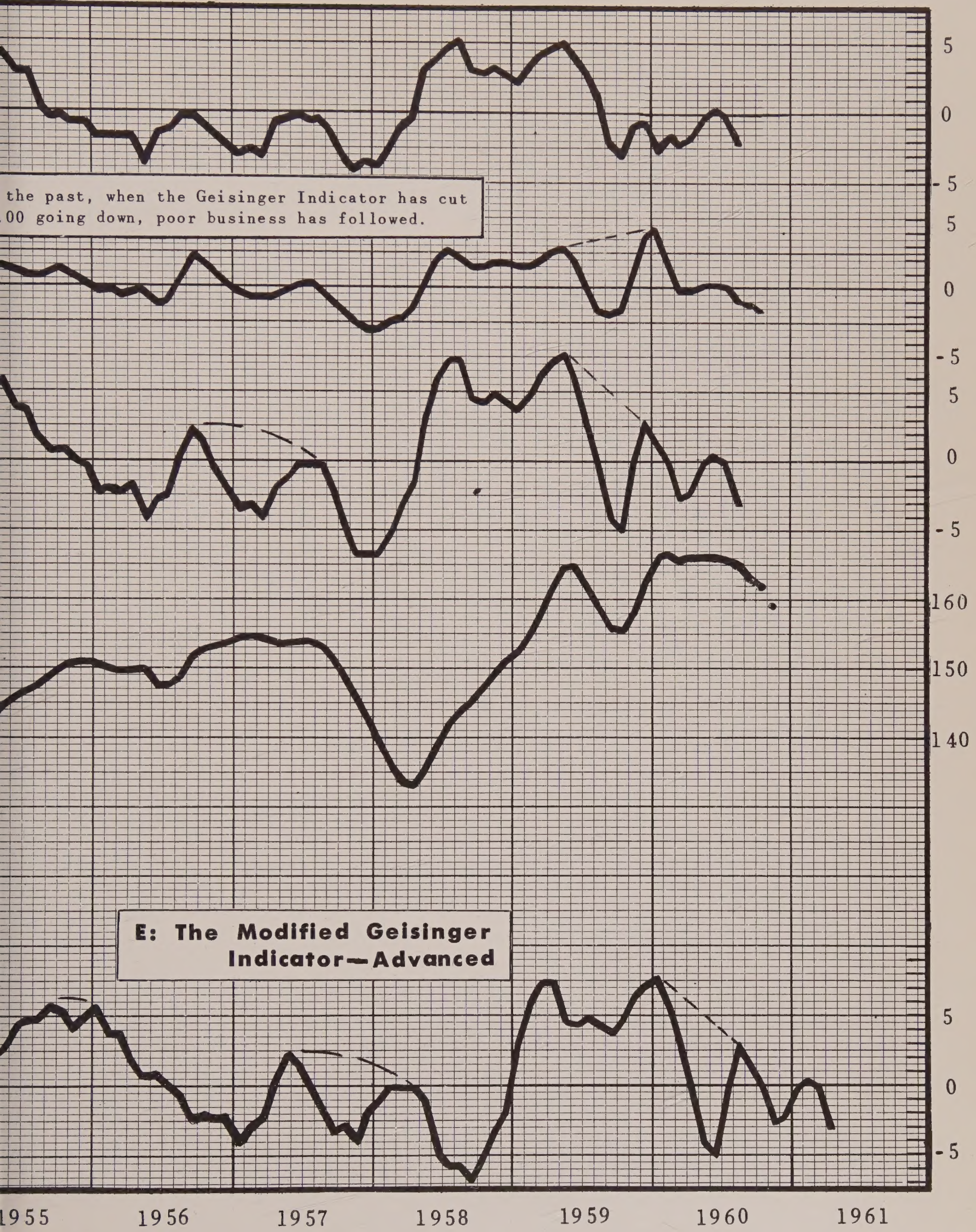
p - preliminary; D.S. - danger signal; * - not yet available

ne chart: See the next two pages

The Geisinger Indicator Compared To Indus



luction:



the past, when the Geisinger Indicator has cut .00 going down, poor business has followed.

E: The Modified Geisinger Indicator—Advanced

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